This Listing of Claims will replace all prior versions and listings of the

Claims in the subject Patent Application:

<u>Listing of Claims</u>:

Claims 1-36 (Canceled)

37. (Currently Amended) A system for assessing cardiac function, the

system comprising:

(a) means for receiving a first plurality of user input ST segment and

PQ segment offset times and durations and receiving a corresponding plurality of

R-R interval ranges, wherein each of the ST and PQ segment offset times specifies

an offset time from an R wave peak for one of the R-R interval ranges;

(b) electrical circuitry means for determining an R-R interval

between a prior beat and a current beat, thereby generating a current R-R interval;

(c) processor means for determining an R wave peak of the current

beat;

(d) processor means for selecting both a current beat PQ offset time

and duration, and a current beat ST offset time and duration from the user input

PQ and ST offset and duration times according to the current R-R interval;

(e) processor means for computing ST-segment deviation of the

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current beat as equal to an average value of an ST segment of the current beat minus an average value of a PQ segment of the current beat, wherein the average values of the ST and PQ segments are based on the current beat ST and current beat PQ segment offset times and durations; and

(f) means for determining a baseline ST deviation value; and,

(g) (f) processor means for assessing cardiac function based upon the difference between the baseline ST deviation value and the ST-segment deviation of the current beat.

38-46 (Canceled).

47. (Currently amended) The system of claim 37 wherein the current beat PQ and ST offset times are the samples in the PQ and ST segments respectively closest to the R wave peak of the current beat.

48. (Canceled).